

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A power-saving effect ~~displaying~~calculating unit in an inverter that changes operation frequencies of a three-phase alternating current electric motor, comprising:

a power-consumption computing unit that calculates a power consumption based on an output voltage, which is calculated by an output-voltage computing unit using an output frequency and a bus voltage, and an output current of the inverter; and

a power-saving-effect generating unit that generates an instantaneous power-saving effect, at the time of ~~inverter~~ a general operation of the inverter ~~with respect as compared to a commercial operation without the inverter~~, from ~~electric characteristic~~ the instantaneous power consumption at the time of a general operation of the inverter obtained from the power-consumption computing unit and data that result ~~resulting~~ from a comparison of a first instantaneous power consumption at the time of the general operation of the inverter ~~operation~~ and a second instantaneous power consumption at the time of the commercial operation without the inverter ~~both calculated by the power-consumption computing unit.~~

2. (currently amended): The power-saving effect ~~displaying-calculating unit in an inverter~~ according to claim 1, wherein the power-consumption computing unit calculates the power consumption for a plurality of sampling periods, and

wherein the power-saving-effect generating unit further calculates an integration of the power-saving effect over the sampling periods to obtain an integration value.

3. (currently amended): The power-saving effect ~~displaying-calculating unit in an inverter~~ according to claim 1, further comprising an arrangement that displays at least one of the power-saving effect and an integration value that is calculated by integrating the power-saving effect obtained by the power-saving-effect generating unit over a plurality of time periods.

4. (currently amended): The power-saving effect ~~displaying-calculating unit in an inverter~~ according to claim 2, further comprising an arrangement that displays at least one of the power-saving effect and the integration value ~~obtained by the power-saving-effect generating unit.~~

5. (currently amended): A power-saving effect displaying unit in an inverter that changes operation frequencies of a three-phase alternating current electric motor, comprising:

a power-consumption computing unit that calculates a power consumption under operation with the inverter based on a voltage obtained by an output-voltage computing unit and a current obtained by a current detecting unit, said power consumption being calculated for a sampling period; and

a power-saving-effect generating unit that generates a power-saving effect based on the power consumption, ~~wherein~~;

wherein the power-saving effect ~~that can be obtained~~ obtainable under a general operation with an the inverter with respect as compared to a commercial operation without the inverter is displayed based on ~~electric characteristic data that is obtained by comparing an a first~~ instantaneous power consumption under the general operation with the inverter and ~~an a second~~ instantaneous power consumption under the commercial operation without the inverter, ~~that are~~ as calculated by the power-consumption computing unit, and

wherein the power-saving effect is calculated by multiplying a difference between an ~~electric characteristic the second instantaneous power consumption under general damper control~~ the commercial operation without the inverter and an ~~electric characteristic the first~~ instantaneous power consumption under the general operation with the inverter, ~~representing electric characteristic data and resulting from the comparison with power consumption under the commercial operation by a ratio between the power consumption under the operation with the inverter calculated every for the sampling period and the electric characteristic that represents~~

first instantaneous power consumption at the time of under the general inverter operation of the inverter.

6. (new): A power-saving effect calculating unit in an inverter that changes operation frequencies of a three-phase alternating current electric motor, the power-saving effect calculating unit comprising:

a power-consumption computing unit that calculates a power consumption under operation with the inverter based on a voltage obtained by an output-voltage computing unit and a current obtained by a current detecting unit, said power consumption being calculated for a sampling period; and

a power-saving-effect generating unit that generates a power-saving effect based on the power consumption;

wherein the power-saving effect obtainable under a general operation with the inverter as compared to a commercial operation without the inverter is calculated based on the instantaneous power consumption obtained from the power-consumption computing unit and data obtained by comparing a first instantaneous power consumption under the general operation with the inverter and a second instantaneous power consumption under the commercial operation without the inverter, and

wherein the power-saving effect is calculated by multiplying a difference between the second instantaneous power consumption under the commercial operation without the inverter

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and the first instantaneous power consumption under the general operation with the inverter, by a ratio between the power consumption under the operation with the inverter for the sampling period and the first instantaneous power consumption under the general operation of the inverter.